7/11/88 A2500-2

Paper Paperboard & Wood Pulp

MONTHLY STATISTICAL SUMMARY - Vol. 66 No. 6 JUNE 1988

PAPER AND PAPERBOARD PRODUCTION: CONTINUED GROWTH

The growth trends visible in the total U.S. economy are fully reflected in the demand for paper and paperboard. The first quarter 1988 real GNP was 3.8% over its year-earlier level; the seasonally adjusted rate of paper and paperboard production in the first 5 months of 1988 was up 4.7%.

Growth in paper and paperboard imports has slowed to less than 4% per year, while exports are up sharply. New supply (production plus imports less exports) is about 3.8% ahead of its year-ago rate. This proxy for paper and paperboard consumption compares well with the increase in real GNP.

At the present time comparisons of current with year-ago rates overstate secular growth rates. Last year real GNP accelerated in the third and fourth quarters, as did growth in demand for paper and paperboard. Comparisons of current rates with the 1987 totals -- which roughly adjust for the more rapid second half 1987 growth -- show the estimated first quarter real GNP up 2.5%, paper and paperboard production up 3.1% and paper and paperboard new supply up 2.5%.

Most of the increase in real GNP can be traced to capital goods and exports; consumer purchases of goods and services also offered major support during the first quarter of this year. Employment rates continue high and inflation and interest rates are still moderate. The packaging sectors of the paper industry find important markets in consumer goods, while white papers are responding to the rising rates of activity in all sectors of the economy.

The growth of real GNP appears to be slowing from the rapid pace of the previous three quarters, another reason why comparison with year-ago levels presently overstate secular growth. The economic consensus suggests that while total economic activity will continue to rise during the remainder of the year, the rate will probably remain near the slower rate evident in the current quarter, a rate fairly close to the long-term trend.

Continued on page 2

COPYRIGHT © 1988 AMERICAN PAPER INSTITUTE 260 Madison Avenue New York, N.Y. 10016

Demand by Grade

The seasonally adjusted rate of paper and paperboard production continued to inch up in May, bringing the five month 1988 rate to a record-high 76.8 million tons per year. The seasonal pattern itself is still in the process of change as producers shift their timing of maintenance and repair shutdowns away from the traditional July and December periods. This is evident in the unadjusted production totals (see table on page 3) for many of the paper and paperboard grades of this past month. The available data on new orders and inventories underscore the underlying strength in paper and paperboard markets.

Paper production in the January-May 1988 period reached a seasonally adjusted high of 38.6 million tons per year, 5.8% ahead of its year-ago level. The larger gains continue in communication papers -- newsprint, coated papers and uncoated free sheet papers. Shipments of bleached bristols are also showing large increases, with strength evident in most of the major sectors: tag stock, index and printing bristols and coated bristols.

The steepest growth among the various paper grades is in shipments of coated papers. At 7.4 million tons per year, the January-May 1988 total was 12.6% ahead of its year-earlier level and 8% above the total for all of 1987. The current rate was close to the reported capacity total of 7.6 million tons. The API's November 1987 Capacity Survey reported that coated paper capacity will rise to 8.1 million tons in 1989 and to 8.3 million tons in 1990.

The current strength in demand is spread across its major markets: periodicals, book publishing and commercial printing. Imports are augmenting the total supply of coated papers. The January-April 1988 rate of imports was 743,000 tons per year, 26% above its corresponding 1987 level. About one-third of these imports are coming from Canada, another third from Sweden and West Germany, with the remainder from a wide range of European and Far Eastern countries. These imports currently account for 9% of the new supply of coated papers.

Paperboard production, at a seasonally adjusted rate of 38.2 million tons per year in the first five months of 1988, was 3.6% ahead of its year-ago level and 1.9% above its 1987 total. The 1988 rate was equivalent to nearly 97% of the reported capacity. Paperboard capacity is scheduled to increase by 2.2%, to 40.4 million tons in 1989 and by 2.4%, to 41.4 million tons, in 1990.

The containerboard grades continue to account for the major paperboard gains. Unbleached kraft linerboard production was up 6.9%, with production for export showing a 7.2% gain. Total containerboard production for domestic use rose 5.2%, closely in line with the 5.1% gain reported for shipments of corrugated shipping containers. Inventories of containerboard at

Continued on page 11

PAPER AND PAPERBOARD STATISTICS

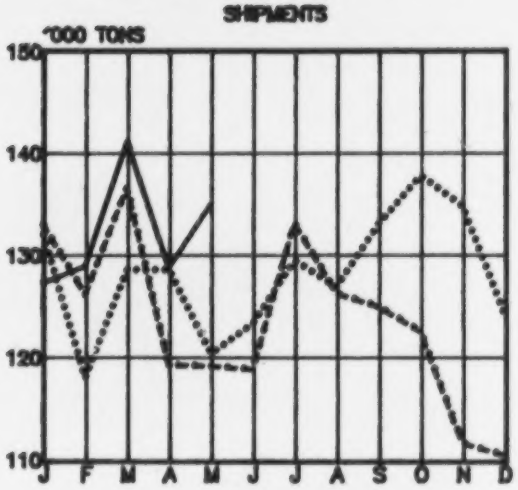
PRODUCTION, SHIPMENTS AND ORDERS
(Thousands of Short Tons)

	YEAR 1986	YEAR 1987	FEBRUARY 1988 (P)	MARCH 1988 (P)	APRIL 1988 (P)	MAY 1988 (P)	Annual Rate Y-T-D 1988	% Change From same Period Last Year
PAPER								
Newsprint - Production	5,630	5,842	479	510	497	514	5,996	5.5
- Shipments	5,630	5,854	479	505	492	510	5,924	4.1
Printing & Writing Sum	19,668	20,780	1,767	1,944	1,816	1,780	21,935	8.6
Groundwood Paper - Shipments	1,540	1,485	129	139	127	135	1,578	3.4
- New Orders	1,553	1,542	137	131	125	156	1,636	5.9
-Unfilled Orders	124	181	197	190	188	213	213	82.2
Coated Papers - Shipments	6,263	6,860	593	653	609	600	7,422	12.6
- New Orders	6,334	7,099	583	646	634	623	7,471	10.1
- Unfilled Orders	469	734	692	694	714	737	737	30.3
Unctd Free Sheet - Shipments	10,410	10,977	919	1,020	947	921	11,401	7.3
- New Orders	10,485	11,189	917	1,032	991	923	11,535	8.6
- Unfilled Orders	587	777	746	767	804	801	801	45.0
Thin Papers - Shipments	271	251	24	19	20	18	240	-7.7
Cotton Fiber Paper - Shipments	152	163	14	15	13	14	167	1.0
Bleached Bristols - Production RS	1,033	1,044	89	97	101	93	1,128	9.3
Tissue Paper - Production	5,095	5,301	437	474	444	463	5,432	4.0
Total Packaging & Other Paper	5,117	5,068	435	454	439	422	5,256	2.0
Unbl. Kraft Paper - Shipments	3,303	3,075	255	262	255	235	3,049	-3.2
Other Paper - Production	1,814	1,993	180	192	183	187	2,206	10.2
TOTAL PAPER-Production-Unadj.	35,510	36,990	3,119	3,382	3,196	3,179	38,619	6.5
-Production-S.A.			3,202	3,217	3,232	3,247	38,602	5.8
PAPERBOARD - PRODUCTION								
Solid Wood Pulp Furnish	27,336	28,944	2,380	2,571	2,362	2,499	29,556	3.8
Total Unbl. Kraft Paperboard	17,689	18,913	1,566	1,696	1,538	1,649	19,405	5.6
Unbl. Kraft Linerboard (1)	16,402	17,500	1,466	1,575	1,434	1,539	18,097	6.9
Production for Export	2,246	2,318	218	225	175	184	2,418	7.2
Other Unbl. Kraft Paperboard	1,287	1,280	101	121	104	110	1,308	-1.0
Semichemical Paperboard	5,376	5,600	454	492	447	491	5,694	1.7
Production for Export	213	189	11	15	10	10	135	-37.3
Solid Bleached Paperboard RS	4,222	4,420	360	383	377	360	4,457	-0.3
Production for Export	569	619	51	53	52	45	599	-10.5
Recycled Paperboard	8,092	8,506	717	771	754	761	8,996	6.4
Production for Export	70	75	5	7	6	7	76	59.0
TOTAL PAPERBOARD-Prod.-Unadj.	35,379	37,439	3,097	3,342	3,116	3,260	38,552	4.5
- Containerboard Prod.(Dom. Use)	21,426	23,016	1,880	2,035	1,891	2,038	23,616	5.2
- Boxboard Prod.(Dom. Use) (2)	5,863	6,026	505	539	529	506	6,275	3.3
- All Other P'bd Prod.(D.U.) (2)	4,992	5,196	427	468	453	470	5,434	4.8
- Total Paperbd Prod. for Export	3,097	3,201	285	301	243	246	3,228	1.3
TOTAL PAPERBOARD PROD.- S.A.			3,177	3,179	3,182	3,184	38,155	3.6
TOTAL PAPER AND PAPERBOARD								
Production - Unadj. (R)	70,889	74,429	6,215	6,724	6,312	6,439	77,171	5.5
Production - S.A.			6,379	6,396	6,414	6,431	76,757	4.7

(1) Includes all exports of kraft paperboard. R - Revised P - Preliminary S.A. - Seasonally Adjusted
(2) Data for unbl. kraft folding boxboard incl. in All Other P'bd. RS - Revised Series

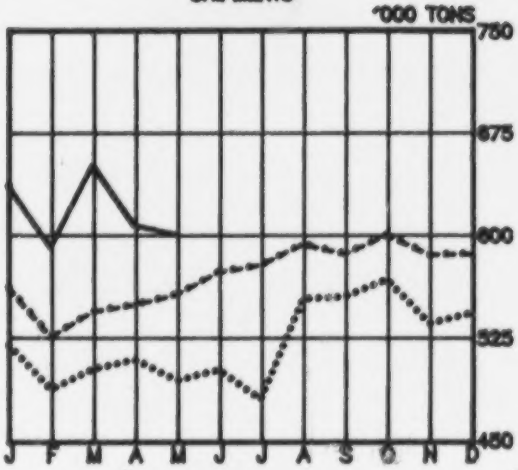
GROUNDWOOD PAPER, UNCOATED

SHIPMENTS



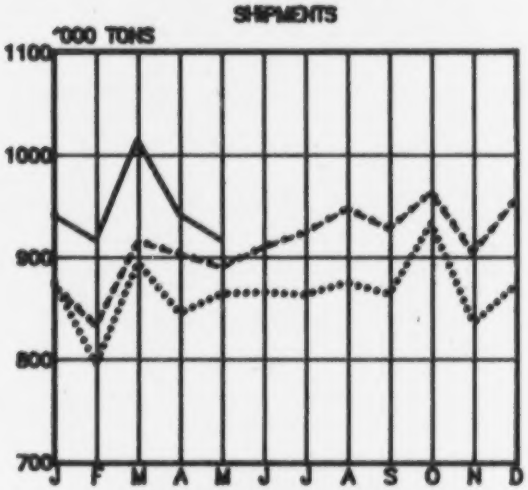
COATED PAPER

SHIPMENTS



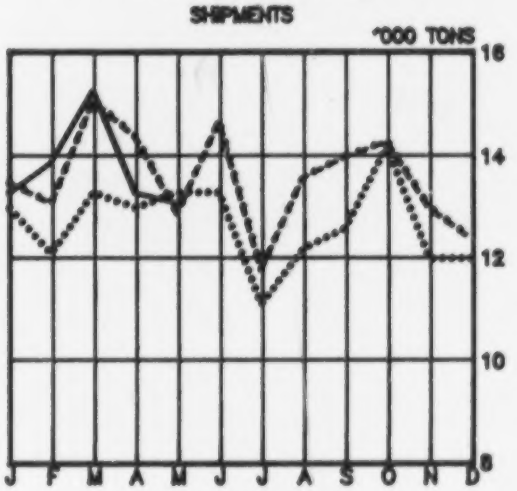
UNCOATED FREE SHEET PAPERS

SHIPMENTS



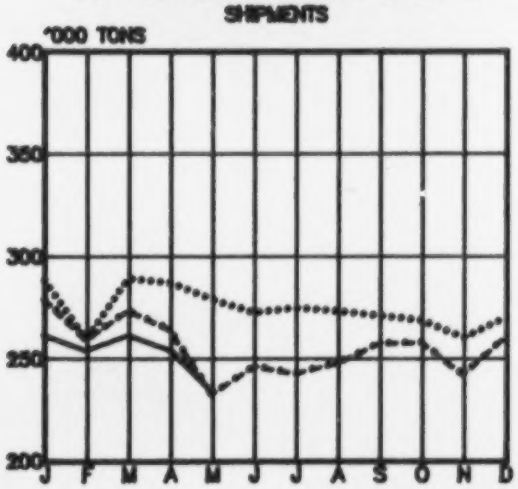
COTTON FIBER PAPER

SHIPMENTS



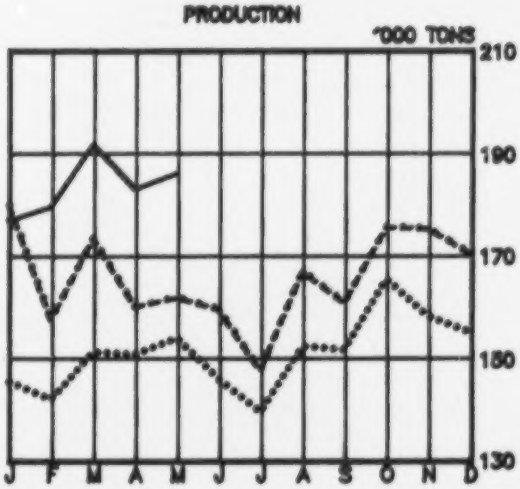
UNBLEACHED KRAFT PACKAGING AND INDUSTRIAL CONVERTING PAPER

SHIPMENTS



OTHER PAPER

PRODUCTION



1986 ..... 1987 - - - - - 1988 ———

W O O D P U L P S T A T I S T I C S
(Thousands of Tons)

	YEAR 1986	YEAR 1987	JANUARY 1988	FEBRUARY 1988	MARCH 1988	APRIL 1988	Annual Rate Y-T-D 1988	% Change from same Period Last Year
TOTAL WOOD PULP					R	P		
Total Wood Pulp - Production	57,017	59,564	5,276	4,919	5,227	5,003	61,276	4.5
- Imports	4,582	4,850	390	429	432	428	5,036	1.2
- Exports	4,458	4,889	391	444	491	453	5,335	15.5
- New Supply	57,140	59,525	5,276	4,903	5,169	4,978	60,977	3.3
Dissolving Pulp - Production	1,258	1,312	98	116	109	105	1,285	0.0
- Imports	255	198	20	21	26	21	263	15.6
- Exports	711	752	67	41	78	81	803	2.7
- New Supply	801	757	52	95	57	44	744	1.9
Paper Grades - Production	46,081	48,293	4,285	3,981	4,259	4,034	49,676	4.5
Chemical Pulp - Imports	4,220	4,456	353	374	378	370	4,429	-3.6
- Exports	3,689	4,111	322	401	402	365	4,471	17.4
- New Supply	46,612	48,637	4,316	3,954	4,235	4,039	49,633	2.7
Groundwood and - Production	5,487	5,714	517	472	500	510	6,000	8.5
Thermo-Mech. - Imports	108	197	16	34	28	37	345	121.2
- Exports	59	26	1	2	11	6	61	116.8
- New Supply	5,536	5,885	532	504	518	541	6,284	11.1
Semi-Chemical - Production	4,191	4,246	376	350	360	354	4,315	1.0
- Imports								
- Exports								
- New Supply	4,191	4,246	376	350	360	354	4,315	1.0
MARKET WOOD PULP								
Total Market - Production	7,514	8,128	722	687	730	677	8,449	7.6
Wood Pulp - Imports	3,122	3,235	272	289	296	298	3,463	10.2
- Exports	4,470	4,820	363	400	477	392	4,895	10.2
- New Supply	6,166	6,543	631	576	549	583	7,018	7.1
Dissolving Pulp - Production	1,234	1,308	98	116	109	104	1,283	0.4
- Imports	212	154	19	19	18	20	228	28.3
- Exports	718	775	57	45	85	62	747	3.5
- New Supply	728	687	61	90	42	62	765	4.2
Paper Grades - Production	6,264	6,806	623	570	619	571	7,148	8.9
Chemical Pulp - Imports	2,831	2,975	245	246	261	261	3,038	6.3
- Exports	3,752	4,045	306	355	391	330	4,147	11.5
- New Supply	5,343	5,736	562	460	489	502	6,038	5.9
Groundwood Pulp - Production	16	14	2	1	2	1	18	29.6
and All Other - Imports	79	106	8	24	16	18	197	85.7
- Exports	0	0	0	0	0	(0)	0	0.0
- New Supply	96	120	9	26	18	19	215	79.1

SOURCES: Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, API. Total Wood Pulp Imports & Exports - Department of Commerce.

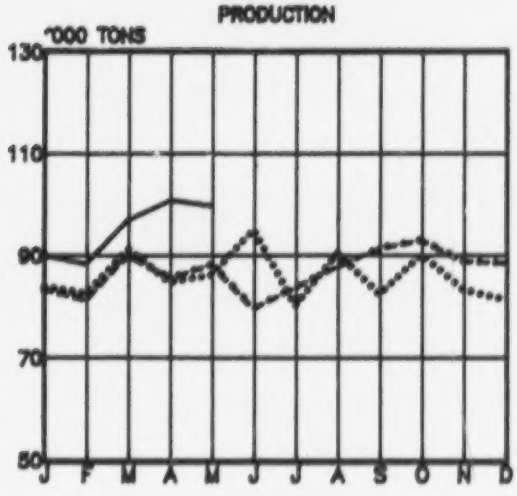
F I B R O U S R A W M A T E R I A L S
(Thousands of tons)

CONSUMPTION AT PAPER & PAPERBOARD MILLS					R	P		
Total	74,357	77,784	6,786	6,455	6,867	6,543	79,952	4.2
Total Wood Pulp	57,072	59,488	5,231	4,926	5,207	5,003	61,100	3.8
Waste Paper	17,285	18,296	1,555	1,529	1,660	1,540	18,852	5.4
INVENTORIES								
Chemical Paper Grade Market Pulp								
Producers' Own-Use Inventories	174	170	170	162	165	169	169	-9.2
Producers' Market Inventories	284	224	224	292	265	237	256	-14.6
Consumers' Purchased Inventories ♦	496	529	529	508	503	532	535	3.4
Waste Paper at Paper & Bd. Mills	838	920	920	867	871	926	942	12.3
Days of Supply at Pulp Mills of Chemical Paper Grade Mkt Pulp	16	12	12	15	13	12	13	-18.8

SOURCES: Wood Pulp Data, Pulp Division, Pulp, Materials and Technology Group, API. Waste Paper Data, Paper Recycling Committee, API. ♦ Includes all grades of wood pulp.
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons

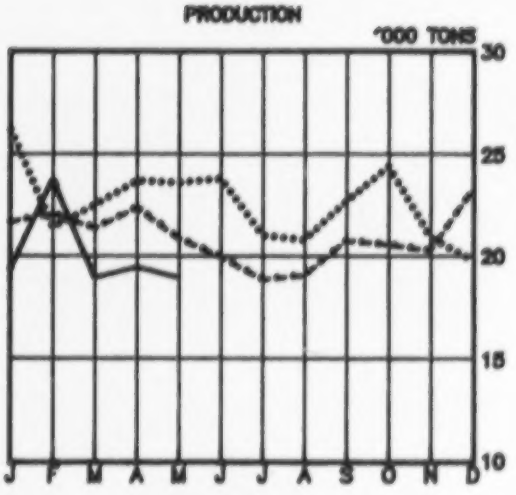
BLEACHED BRISTOLS

PRODUCTION



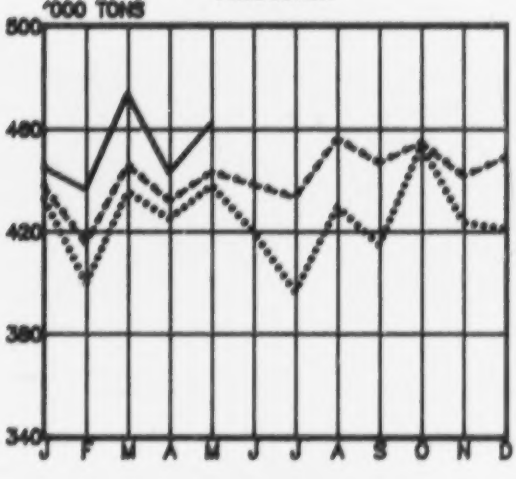
THIN PAPER

PRODUCTION



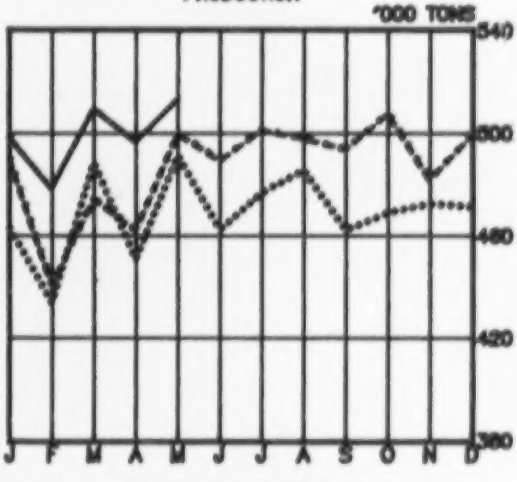
TISSUE PAPER

PRODUCTION



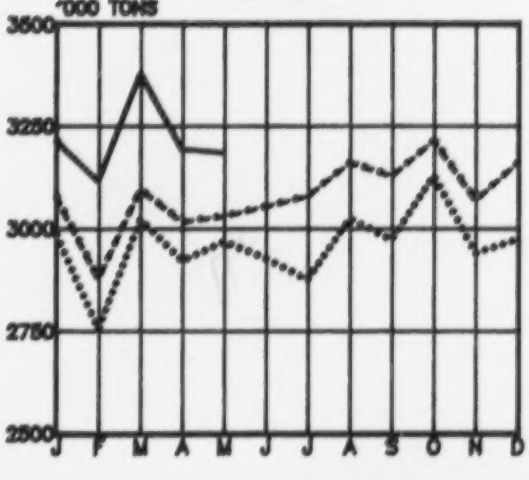
NEWSPRINT

PRODUCTION



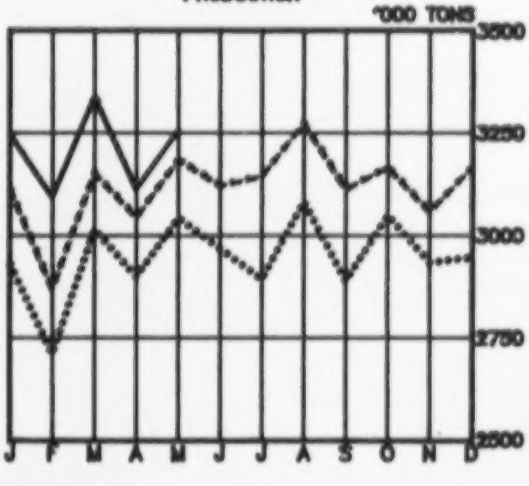
TOTAL PAPER

PRODUCTION



TOTAL PAPERBOARD

PRODUCTION



1986 ..... 1987 - - - - 1988 ———

F I B R O U S R A W M A T E R I A L S

(Thousands of Standard (128 cubic foot) Cords)

		YEAR 1986	YEAR 1987	JANUARY 1988	FEBRUARY 1988	MARCH 1988	APRIL 1988	Annual Rate Y-T-D 1988	% Change From Same Period Last Year
PULPWOOD									
Total U.S.	- Total Receipts	98,943	94,312	7,737	7,924	8,345	7,911	95,751	1.2
	- Total Consumpt	91,434	93,946	8,223	7,743	8,249	8,137	97,056	3.3
	- Residues *	32,755	32,899	2,585	2,756	2,924	2,925	33,570	2.8
	- Inventories	4,794	5,896	4,629	4,777	4,942	4,642	4,642	-6.2
So. Atlantic	- Total Receipts	29,513	31,147	2,554	2,561	2,807	2,663	31,755	5.4
	- Total Consumpt	29,425	30,915	2,684	2,521	2,788	2,740	31,959	5.5
	- Residues *	9,343	9,553	810	837	903	865	10,245	15.5
	- Inventories	994	1,211	1,075	1,070	1,155	1,090	1,090	18.2
Northeast	- Total Receipts	7,277	6,941	607	606	621	456	6,870	-7.3
	- Total Consumpt	7,227	7,189	644	582	645	660	7,593	1.8
	- Residues *	1,419	1,543	118	129	158	144	1,647	3.8
	- Inventories	484	594	590	647	657	491	491	14.2
South Central	- Total Receipts	31,798	33,650	2,637	2,771	3,005	2,799	33,636	-1.3
	- Total Consumpt	32,113	33,959	2,810	2,742	2,981	2,754	33,885	2.3
	- Residues *	9,792	9,992	745	836	887	806	9,822	-5.7
	- Inventories	926	1,294	1,066	1,085	1,070	1,067	1,067	-3.1
North Central	- Total Receipts	6,571	6,552	675	666	589	482	7,236	9.7
	- Total Consumpt	6,730	6,764	652	557	595	588	7,176	6.3
	- Residues *	1,042	1,263	167	97	108	102	1,422	39.4
	- Inventories	892	830	873	989	1,000	891	891	-6.1
West	- Total Receipts	15,792	16,022	1,266	1,320	1,323	1,511	16,254	-1.1
	- Total Consumpt	15,939	16,099	1,425	1,341	1,320	1,395	16,443	1.1
	- Residues *	11,159	10,548	745	857	868	1,008	10,434	-3.0
	- Inventories	1,498	1,167	1,867	986	1,060	1,103	1,103	-28.7

* - Consumption of Residues in Cord Equivalents. SOURCE: American Pulpwood Association 21-Jun-88

U N I T E D S T A T E S T R A D E W I T H C A N A D A

IMPORTS FROM CANADA

	YEAR 1987 Tons	YEAR 1987 ($000's)	MARCH Tons	MARCH 1988 ($000)	APRIL Tons	APRIL 1988 ($000)	Annual Rate Y-T-D 1988 Tons	% Change from same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)	15,382	1,736	2,188	210	6,111	746	39,228	2528.4
Pulpwood chips	487,147	15,250	79,855	2,562	59,216	2,112	849,456	116.3
Wood Pulp, Total	4,328,114	1,842,819	369,645	181,638	347,775	176,251	4,277,217	-4.2
Waste Fibrous Materials, Total	186,286	36,423	24,646	5,250	18,161	3,699	246,528	34.5
Paper, Board & Products, Total	10,588,047	5,093,983	979,388	527,583	865,925	467,317	10,748,873	1.3
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	10,441,472	4,845,663	966,878	583,147	854,257	446,127	10,599,584	1.3
Paper, Paperboard & Products	10,365,412	5,027,943	962,845	522,198	850,227	462,253	10,561,228	1.8
Paper & Paperboard, Only	10,218,838	4,779,702	948,815	497,843	838,559	441,063	10,411,852	1.9
Paper, Total	9,961,198	4,698,148	926,777	490,581	818,196	433,883	10,149,886	1.8
Newsprint	8,588,389	3,956,147	785,371	406,193	686,739	353,992	8,568,213	-0.9
Printing, Writing & Rel. Pap.	1,111,641	681,978	115,881	69,343	108,247	66,488	1,282,760	21.2
Pack. & Ind. Conv. Paper	215,514	102,986	22,869	11,314	19,141	10,151	244,658	5.7
Special Industrial Paper	5,478	9,844	431	824	287	486	4,259	-36.2
Tissue Paper	40,257	27,194	3,825	2,908	3,862	2,934	49,995	43.1
Paperboard, Total	257,639	81,554	22,038	7,261	20,364	7,180	261,966	7.7
Convtd Paper&Paperbd Products	146,575	248,241	13,230	24,356	11,668	21,190	149,369	-3.9
Wet Machine Board	2,899	1,977	345	246	230	166	3,259	6.6
Construction Paper & Board	219,744	63,983	16,918	5,050	15,468	4,098	184,394	-22.7

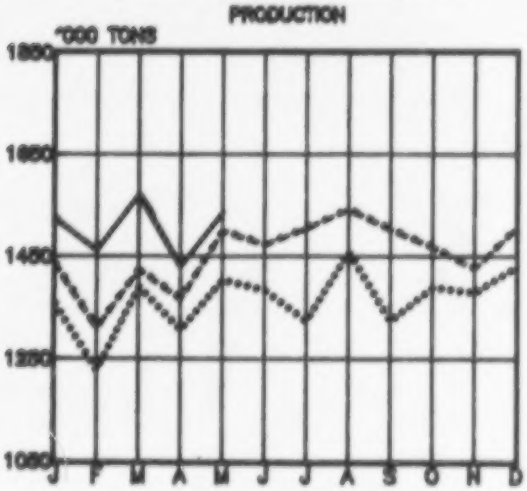
EXPORTS TO CANADA

Pulpwood, Roundwood (in cords of 128 cubic feet)	12,617	778	849	51	3,444	172	14,987	184.6
Pulpwood chips	61,575	4,814	4,933	328	4,519	225	41,820	-53.9
Wood Pulp, Total	198,921	75,956	20,546	6,738	33,737	9,112	288,527	43.8
Cotton Pulp & Other Pulp	58,288	14,775	5,924	1,677	5,741	1,683	85,857	148.6
Waste Paper	286,898	38,592	29,838	3,273	27,736	3,249	293,838	14.5
Paper, Board & Products, Total	957,434	598,429	97,511	65,689	100,852	61,103	1,406,852	59.4
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	712,494	398,256	74,912	44,838	76,684	41,147	1,141,817	68.1
Paper, Paperboard & Products	920,755	581,481	94,924	64,261	97,724	59,782	1,371,689	61.7
Paper & Paperboard, Only	675,815	381,308	71,346	43,498	73,557	39,746	1,108,655	71.5
Paper, Total	397,585	250,807	31,462	28,235	32,628	25,870	379,271	24.5
Newsprint	4,525	3,728	312	284	297	288	3,346	-33.5
Printing, Writing & Rel. Pap.	151,716	125,667	16,777	15,129	15,265	14,175	177,268	22.2
Pack. & Ind. Conv. Paper	25,826	17,841	2,885	2,133	4,399	2,982	44,399	67.3
Special Industrial Paper	110,107	97,088	11,958	10,936	12,288	7,883	149,138	28.1
Tissue Paper	5,411	6,498	438	654	379	622	5,129	37.7
Paperboard, Total	278,230	130,501	39,884	15,255	40,937	13,877	729,383	113.4
Convtd Paper&Paperbd Products	244,940	200,173	23,478	20,771	24,167	19,956	263,935	30.1
Wet Machine Board	10,212	4,828	423	163	629	165	6,836	-42.1
Construction Paper & Board	26,467	12,128	2,264	1,185	2,698	1,236	28,326	26.7

SOURCE: Bureau of Census, Department of Commerce . E - Estimate of tonnage based on square foot data 21-Jun-88

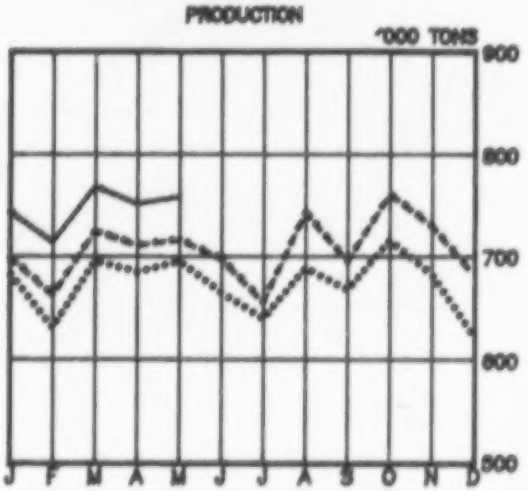
UNBLEACHED KRAFT LINERBOARD

PRODUCTION



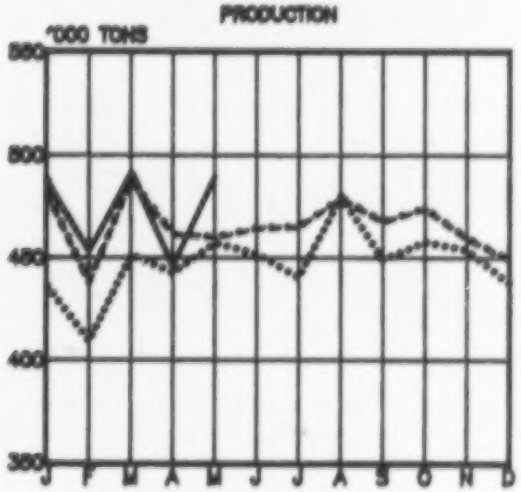
RECYCLED PAPERBOARD

PRODUCTION



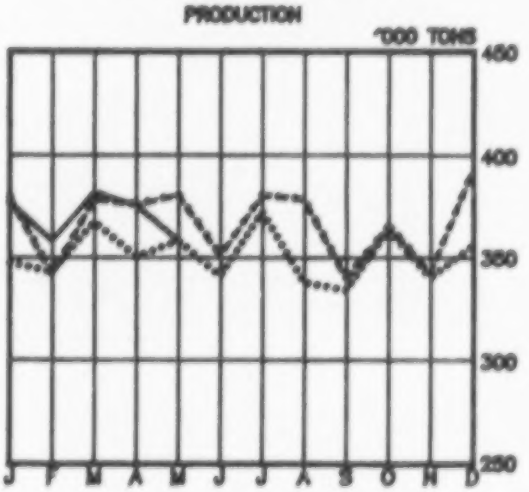
SEMICHEMICAL PAPERBOARD

PRODUCTION



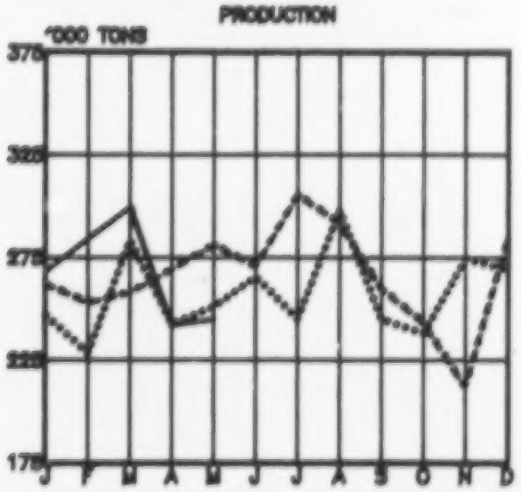
SOLID BLEACHED PAPERBOARD

PRODUCTION



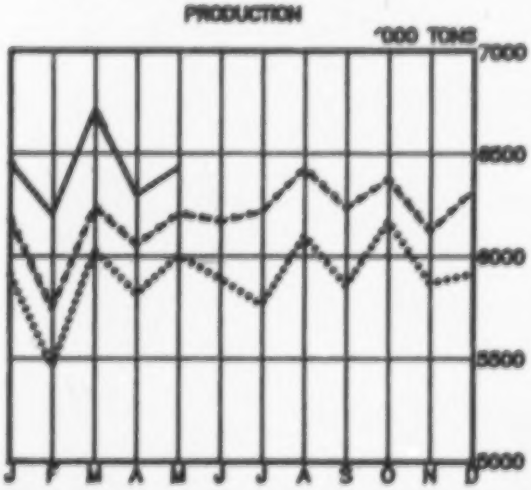
PAPERBOARD FOR EXPORT

PRODUCTION



TOTAL PAPER AND PAPERBOARD

PRODUCTION



1986 ..... 1987 - - - - - 1988 ———

I M P O R T S

	YEAR 1987 Tons	YEAR 1987 $000	1988 MARCH Tons	1988 MARCH $000	1988 APRIL Tons	1988 APRIL $000	(1) Annual Rate YTD 1988 Tons	% Change from same Period Last Year
Pulpwood Roundwood (cords)	15,432	1,746	2,108	210	6,111	746	39,228	2390.7
Pulpwood Chips	525,629	15,476	88,419	2,589	61,138	2,151	861,836	74.1
Total All Imports	17,891,172	9,241,600	1,657,347	940,160	1,536,161	882,890	18,427,881	2.8
Wood Pulp Total	4,050,230	2,069,389	432,156	211,292	427,754	217,783	5,035,827	1.2
Waste Paper	127,398	19,231	16,307	2,794	13,186	2,023	178,131	98.4
Other Fibrous Materials	76,491	27,287	10,073	3,592	7,884	2,570	89,336	2.0
Paper Board & Products Total	12,837,046	6,927,693	1,196,811	722,662	1,088,136	660,515	13,124,586	3.8
Paper Paperboard Wet Machine Bd. & Construction Paper & Board	12,435,486	5,995,122	1,161,296	611,925	1,056,835	575,867	12,726,581	3.4
Paper Ppbd & Prds ex Cnst&WMB	12,527,598	6,828,736	1,173,960	714,485	1,063,899	651,818	12,846,888	3.4
Paper & Paperboard Only	12,126,839	5,896,165	1,136,246	623,747	1,030,998	567,169	12,448,894	3.8
Paper Total	11,765,288	5,768,783	1,107,568	613,416	1,004,125	557,157	12,116,842	4.4
Newsprint	8,986,548	4,121,327	810,838	417,845	725,384	371,487	8,880,819	-0.9
Printing & Writing	2,410,216	1,412,458	263,834	171,873	247,898	163,427	2,832,882	25.3
Uncoated Groundwood	1,269,774	656,767	132,979	76,418	131,388	77,628	1,474,577	33.1
Coated Print.& Impreg. Pap.	674,531	467,865	72,272	56,881	68,837	52,906	742,866	25.7
Uncoated Free Sheet	417,395	249,943	52,483	34,299	43,263	29,181	558,119	34.7
Uncoated Book	210,624	119,775	24,385	15,768	16,885	10,442	227,014	7.7
Writing and Similar Paper	286,771	138,168	28,898	18,531	27,178	18,739	331,185	62.7
Thin (except Cigarette)	47,567	38,831	5,278	5,835	4,367	3,678	55,629	-1.3
Bristols	958	1,852	182	121	43	52	992	-3.3
Total Pkg & Other Paper	318,324	191,630	28,835	19,965	25,640	17,376	338,620	1.6
Unbleached Kraft Paper	168,420	69,828	15,855	7,294	14,133	6,431	174,725	2.9
Other Pkg. & Indust. Paper	141,984	121,792	12,970	12,671	11,507	10,945	155,895	9.2
Tissue	58,121	43,299	4,863	3,733	6,883	4,857	72,521	35.3
Paperboard, Total	360,831	127,461	28,686	10,331	26,873	10,013	332,952	-14.8
Test or Containerboard	88,981	29,352	4,692	1,967	5,362	2,338	72,251	-15.5
Semi-Chemical Corrugating	128,636	33,898	12,925	3,689	11,924	3,596	146,760	28.7
Other Paperboard	151,214	64,211	11,158	4,675	9,588	4,078	113,842	-38.8
Convtd Paper&Paperbd Products	401,559	932,571	36,815	98,738	32,102	84,648	397,994	-7.5
Paper Products, Total	368,179	866,121	33,470	84,652	28,973	78,841	362,583	-8.1
Paperboard Products, Total	33,380	66,450	3,345	6,086	3,129	5,807	35,411	-1.3
Wet machine Board	3,463	3,638	511	445	311	386	4,476	27.5
Construction Paper & Board	305,985	96,328	25,248	7,712	24,726	8,112	274,822	-11.9
Notes								
Other: No Weight Avail. ($000)		201,453		15,794		13,324	175,698	-16.2
Total Imports Incl. Other($000)		9,245,853		955,954		896,214	18,938,234	17.1

E X P O R T S

							(1)	
Pulpwood, Roundwood (cords)	16,178	913	941	55	3,444	172	17,433	99.1
Pulpwood Chips	2,546,467	188,459	273,471	20,869	221,251	17,786	2,669,171	17.8
Total All Exports	14,797,437	6,887,818	1,537,743	658,823	1,397,422	612,621	16,831,213	28.2
Wood Pulp,Total	4,889,331	2,259,377	490,702	245,872	452,955	232,036	5,335,589	19.5
Cotton Pulp and Other Pulp	182,881	91,365	17,473	9,994	15,112	8,784	226,799	97.3
Waste and Old Paper	4,422,139	593,348	481,179	69,825	423,799	54,868	5,209,149	27.1
Paper, Board & Products,Total	5,303,966	3,103,728	548,389	342,132	505,556	317,821	6,061,765	17.8
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	4,578,778	2,288,329	474,286	258,869	419,491	231,491	5,278,696	17.7
Paper, Ppbd & Prod ex Cnst&WMB	5,196,613	3,044,586	537,349	336,461	495,352	312,572	5,918,612	17.9
Paper & Paperboard, Only	4,471,418	2,221,187	463,246	244,397	429,287	220,265	5,155,536	17.7
Paper, Total	921,397	776,181	93,196	84,684	94,098	81,653	1,062,881	15.9
Newsprint	339,773	218,893	28,329	19,479	31,481	22,223	337,852	-9.8
Printing & Writing	249,892	242,639	27,781	28,444	24,924	26,388	288,564	33.8
Uncoated Groundwood	55,841	39,758	7,365	5,594	5,686	4,532	67,324	55.1
Clay Coated Paper	188,839	72,165	10,396	8,548	9,345	7,567	111,844	19.8
Uncoated Free Sheet	67,858	99,339	7,491	10,899	7,485	11,134	79,289	43.9
Other Printing & Writing	24,554	31,414	2,548	4,211	2,488	3,147	30,116	23.3
Total Pkg. & Other Paper	294,281	232,659	32,181	32,515	31,988	29,466	381,722	28.5
Unbleached Kraft	89,194	48,798	8,548	3,652	8,622	4,134	102,272	10.3
Other Pkg. & Indust. Paper	205,087	251,991	23,634	28,862	23,358	25,332	279,450	32.7
Tissue	38,332	38,799	4,985	4,246	5,713	3,586	93,864	94.4
Paperboard, Total	3,550,021	1,444,926	370,051	159,713	335,190	146,592	4,093,537	18.2
Solid Wood Pulp	3,218,952	1,321,610	348,358	147,829	310,199	135,449	3,791,458	17.3
Total Linerboard	2,296,633	812,161	242,647	92,586	215,868	82,847	2,410,501	6.5
Bleached Kraft Linerboard	102,266	46,429	28,848	9,419	11,261	6,716	177,457	366.6
Unbleached Kraft Linerbd	2,194,367	765,731	231,807	83,167	204,607	76,131	2,233,044	9.4
Other Unbleached Kraft	218,566	78,596	30,096	11,100	20,346	8,758	621,414	166.8
Other Bleached Kraft	647,893	497,923	62,188	42,099	61,922	43,377	699,886	8.9
Semi-Chemical Corrugating	63,951	22,938	5,418	2,853	4,862	1,468	59,657	-19.9
Recycled Paperboard	331,869	123,308	29,701	11,884	24,991	11,143	302,879	30.4
Convtd Paper&Paperbd Products	725,196	823,399	74,102	92,864	66,965	84,328	783,874	18.9
Paper Products, Total	301,292	540,681	31,358	59,258	31,345	55,938	339,995	20.8
Paperboard Products, Total	423,994	282,718	42,745	32,885	34,721	28,389	443,880	18.8
Wet Machine Board	17,328	7,816	1,348	936	811	391	12,471	-43.4
Construction Paper & Board E	98,824	51,485	9,789	5,136	9,392	4,897	118,681	31.4
Notes								
Other: No Weight Avail. ($000)		8,837		848		590	8,782	12.2
Total Exports Incl. Other($000)		6,815,855		659,671		613,212	7,217,794	28.5

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Incl. estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

PRODUCER PRICE INDEXES
1982 = 100

	1986	1987	FEBRUARY 1988	MARCH 1988	APRIL 1988	MAY 1988	Annual Rate Y-T-D 1988	% Change from same Period Last Year
Pulp, Paper and Products except Building Grades	107.5	114.3	119.9	120.7	122.6	124.1	121.2	7.7
Pulp Paper & Products, ex. Building Grades & ex Waste Paper *	106.9	113.2	118.7	119.5	121.5	123.1	120.1	7.7
Total Wood Pulp	94.7	111.5	122.9	126.9	135.0	137.2	128.5	19.0
Total Paper	107.0	102.0	118.1	119.7	121.0	122.0	119.8	8.8
Total Paper, exc. Newsprint	107.9	101.1	117.7	119.0	120.7	121.8	119.5	9.1
Newsprint	103.3	112.3	127.1	127.0	127.2	127.5	126.8	17.0
Total Paperboard	106.5	118.1	122.8	127.1	132.6	133.1	128.4	11.3
Total Paper and Paperboard *	106.8	107.1	119.6	122.0	124.6	125.5	122.5	9.6
Converted Products	109.4	114.7	118.3	118.9	119.8	122.0	119.5	5.4
Waste Paper	142.6	181.4	189.0	190.5	187.9	184.5	189.2	9.4
All Commodities	100.2	102.8	104.6	104.9	105.8	106.5	106.5	3.8
Industrial Commodities	100.0	102.6	104.4	104.7	105.6	106.1	105.2	3.8

SOURCE: Producer Price Indexes: Bureau of Labor Statistics, U.S. Department of Labor * Computed by API

PAPER AND ALLIED PRODUCTS INDUSTRY
SALES, EARNINGS AND BALANCE SHEET DATA
1979 - 1988
(Millions of Dollars)

	Net Sales	Net Profit Before Taxes	Net Profit Before Taxes To Net Sales (%)	Taxes	Net Profit After Taxes	Net Profit After Taxes To Net Sales (%)	Stock-holders Equity	Return on Equity (%)	Long-term Debt	Total Assets
1979	55,359	5,486	9.8	1,683	3,723	6.7	23,206	16.0	11,028	45,304
1980	59,333	4,310	7.3	1,275	3,042	5.1	25,889	11.8	11,850	50,040
1980R	56,250	4,045	7.2	1,245	2,800	5.0	24,396	11.5	10,585	45,894
1981	62,502	4,728	7.6	1,621	3,108	5.0	26,452	11.7	11,633	50,706
1981R	62,699	4,728	7.5	1,617	3,110	5.0	26,558	11.7	11,705	50,912
1982	60,293	2,120	3.5	660	1,460	2.4	26,705	5.5	13,149	52,915
1983	66,100	3,439	5.2	1,102	2,337	3.5	27,509	8.5	13,946	56,126
1983R	65,008	3,424	5.3	1,096	2,327	3.6	27,219	8.5	13,565	54,821
1984	71,891	4,812	6.7	1,798	3,015	4.2	28,160	10.7	13,802	58,520
1985	71,761	4,424	6.2	1,533	2,891	4.0	29,780	9.7	15,262	62,613
1985R	71,465	4,399	6.2	1,519	2,880	4.0	29,694	9.7	15,262	62,595
1986	74,896	5,318	7.1	2,025	3,293	4.4	31,254	10.5	18,920	69,132
1986R	74,844	5,298	7.1	2,018	3,280	4.4	31,221	10.5	18,906	69,082
1987	86,603	8,077	9.3	3,088	4,989	5.8	35,162	14.2	20,152	76,791
1987R										
First Quarter	87,912	7,420	8.4	2,948	4,472	5.1	35,922	12.4	21,193	79,188
Second Quarter	95,200	8,668	9.1	3,384	5,284	5.6	36,797	14.4	21,033	80,716
Third Quarter	98,840	10,072	10.2	3,724	6,344	6.4	38,040	16.7	21,401	82,820
Fourth Quarter	100,352	9,280	9.2	3,296	5,980	6.0	39,217	15.2	22,417	85,279
Total	95,576	8,860	9.3	3,338	5,520	5.8	39,217	14.1	22,417	85,279
1988										
First Quarter	102,016	10,824	10.6	3,848	6,976	6.8	40,213	17.3	22,950	86,854

NOTE: Quarterly data are at annual rates.
R=Revised to reflect changes in the number of companies classified to this industry.

SOURCE: Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations - Bureau of the Census, U.S. Department of Commerce.

mills and boxplants were equivalent to 5.7 weeks of supply as of June 1, 1988, compared to 5.6 weeks of supply one year earlier.

Boxboard production continues to show moderate growth. Production of boxboard for domestic use was 3.3% above its year-earlier total in the first five months of 1988. This total includes the solid bleached and recycled folding boxboard grades, set up boxboard and milk carton and food service paperboard. The growth was concentrated in recycled folding boxboard and milk carton stock.

Production of the other paperboard grades for domestic use gained 4.8% in this period, sparked by strong increases in tube, can and drum stock.

FIBROUS MATERIALS

Chemical paper grade market wood pulp production declined by 7% from April to May 1988, largely as a result of maintenance, repair and retrofitting shutdowns. Data available on shipments of market pulp in some of the other major producing countries continue to reflect a strong demand pattern. Inventories of market pulp at pulp mills remain relatively low: as of the end of May 1988 they were 12% below their year-ago level, equivalent to 13 days of supply.

Inventories of market pulp held by consumers are also relatively low. As of the end of April 1988 they were equivalent to 32 days of consumption. In the period from January 1987 through April 1988 the level of inventories held in the 30 to 35 days of consumption range.

U.S. chemical paper grade market pulp mills ship about 59% of their output to the export market. Data collected by API's Pulp Group show the major markets to be Western Europe, which received about 42% of the export total; Japan, 22%; the Asian/African countries 20%.

CAPITAL EXPENDITURES

The Department of Commerce recently reported that paper companies are continuing to increase their expenditures on new plant and equipment, setting new highs in each of the past three years. Their estimates for 1988 expenditures are now at $11.37 billion, which is $80 million higher than their April estimate. This indicates that the 1988 expenditures total will be 27% ahead of the 1987 high and about twice such expenditures in the recession year of 1982.

That same report also shows that expenditures on new plant and equipment will rise steadily throughout 1988, from a $9.6 billion per year rate in the first quarter to $12.9 billion in the final quarter of the year. Virtually all the manufacturing industries reported are projected to follow a

Continued on page 12

similar pattern. The total non-durable goods manufacturing category, for example, is expected to increase its expenditures from a first quarter 1988 level of $82.4 billion per year to $88.8 billion in the fourth quarter.

A recently-released report by DRI/McGraw Hill confirms and extends the trends shown by the Commerce report. This report is in reasonably close agreement with Commerce for 1988 expenditures -- it shows a 30% increase over the 1987 total -- but also shows further growth of 2.6% in 1989.

DRI/McGraw Hill also publishes a report on Research and Development expenditures. Their latest one, issued in June 1988, shows that paper companies are continuing to spend about $1 billion per year on R&D, with a 1990 total projected at $1.1 billion. According to this survey, these totals are equivalent to about 1% of sales and 10% of capital expenditures.

SALES AND EARNINGS

Newly-released data by the Department of Commerce's Bureau of the Census confirm the impact of the high rates of paper and paperboard production on the sales and profits of the paper companies. In its first quarter 1988 Quarterly Financial Report for Manufacturing, Mining and Trade companies, Census reported that sales of paper and allied products companies in the first quarter of 1988 were 16% ahead of their year-ago total; before-tax profits up 46% and after-tax profits up 56%. This translates into a 6.8% ratio of after-tax profits to sales, the highest such ratio since 1979.

At the same time, however, The Census Bureau increased the number of companies classified in the paper industry, although the Bureau does not identify the companies included in this classification. This change in the composition of the paper industry added $9 billion to the 1987 sales total, raising it to $95.6 billion. The first quarter 1988 sales total was reported at $25.5 billion -- a rate of more than $100 million per year. Before-tax profits, at $2.707 billion, were equivalent to 10.6% of sales; after-tax profits $1.744 billion.

The table on page 10 shows the new quarterly data for all of 1987 and the first quarter of 1988, together with the older annual data for the period from 1979 to 1987.

A2500-2

INDUSTRY FACT SHEET

AMERICAN PAPER INSTITUTE, INC.
260 Madison Avenue
New York, New York 10016

June 30, 1988

PRODUCTION (000 TONS)

	MAY 1988	APRIL 1988	MAY 1987	FIRST FIVE MONTHS 1988	FIRST FIVE MONTHS 1987	% CHANGE YR TO DATE 1988/1987
PAPER GRADES						
Newsprint	514	497	500	2,498	2,369	5.5
Printing & Writing	1,780	1,816	1,693	9,140	8,415	8.6
Uncoated Groundwood (s)	135	127	119	657	635	3.4
Coated Paper (s)	600	609	558	3,092	2,746	12.6
Uncoated Free Sheet Paper (s)	921	947	893	4,751	4,426	7.3
Thin Paper (s)	18	20	21	100	109	-7.7
Cotton Fiber Paper (s)	14	13	13	70	69	1.0
Bleached Bristols (s)	93	101	89	470	430	9.3
Tissue Paper	463	444	444	2,263	2,177	4.0
Total Pkg & Other Paper	422	439	396	2,190	2,148	2.0
Unbl. Kraft Paper (s)	235	255	233	1,271	1,313	-3.2
Other Paper	187	183	162	919	834	10.2
TOTAL PAPER	3,179	3,196	3,032	16,091	15,108	6.5
PAPERBOARD GRADES						
Unbleached Kraft Paperboard	1,649	1,538	1,626	8,085	7,656	5.6
Unbleached Kraft Linerboard	1,539	1,434	1,503	7,540	7,052	6.9
Other Unbl. Kraft Paperboard	110	104	110	545	551	-1.0
Semichemical Paperboard	491	447	461	2,372	2,333	1.7
Bleached Paperboard	360	377	382	1,857	1,862	-0.3
Recycled Paperboard	761	754	719	3,748	3,524	6.4
TOTAL PAPERBOARD	3,260	3,116	3,187	16,063	15,376	4.5
TOTAL PAPER AND PAPERBOARD	6,439	6,312	6,220	32,155	30,483	5.5

WOOD PULP (ALL GRADES)	APRIL 1988	MARCH 1988	APRIL 1987	FIRST FOUR MONTHS 1988	FIRST FOUR MONTHS 1987	% CHANGE YR TO DATE 1988/1987
Dissolving & Special Alpha	105	109	108	428	429	0.0
Bleached Sulfite)	125	134	119	512	477	7.4
Unbleached Sulfite)						
Bleached & Semi-Bl. Sulfate	2,162	2,297	2,103	8,802	8,371	5.1
Unbleached Sulfate	1,748	1,827	1,732	7,245	7,005	3.4
Semichemical	354	360	356	1,438	1,425	1.0
Groundwood & Thermomechanical	510	500	450	2,000	1,843	8.5
TOTAL PULP DIVISION DATA	5,003	5,227	4,867	20,425	19,549	4.5

(s) - Shipments
P - Preliminary

JUNE 30, 1988

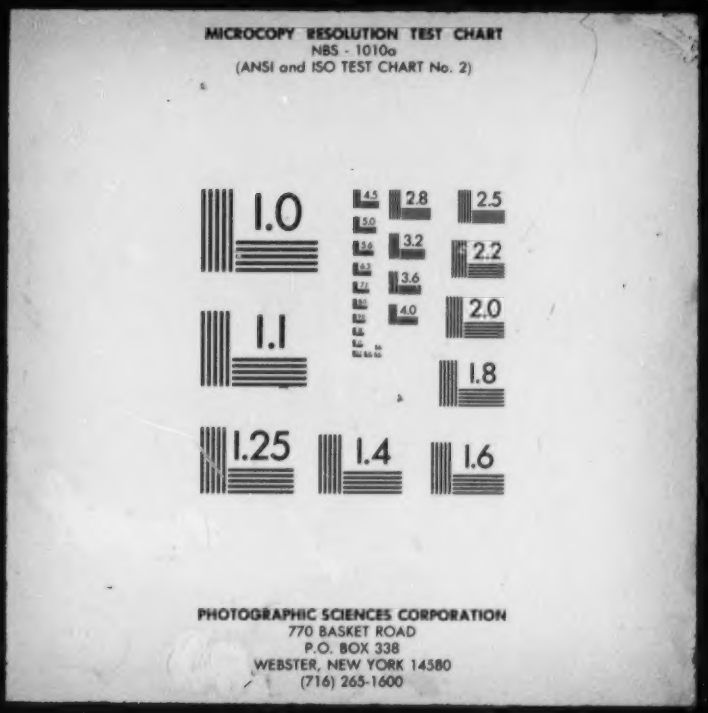
	Full Year 1986	Full Year 1987	INDUSTRY DATA 1987 - 1988 March	April R	May P	Ann. Rate Year - To - Date 1988	% From Same Pd. Last Year
PAPER AND PAPERBOARD -- Tons (000)							
Total Production (API).....: excluding :...	70,889 R	74,429 R	6,724	6,312	6,439	77,171	5.5
Total Seasonally Adjusted....:construction:...			6,396	6,414	6,431	76,756	4.7
Imports (including Products).: and wet :..E	11,597	12,528	1,173	1,063	N.A.	12,965	N.A.
Exports (including Products).: machine :..E	4,593	5,197	537	495	N.A.	5,951	N.A.
Apparent Consumption.....: grades :...	77,893 a	81,760 b	7,032	6,981	(500)	83,770 c	3.8
Paper Production % Tonnage Capacity.....	93.2 g	94.0	102.8	96.8	93.4	97.3	-
Paperboard Production % Tonnage Capacity.....	94.3 g	96.8	100.1	96.5	98.3	98.5	-
			February	March	April		
IMPORTS.....:Including Construction and :...	11,936	12,837	1,032	1,199	1,088	13,125	3.0
EXPORTS.....: WMB Grades (excl. HPB) :...	4,687	5,304	466	548	506	6,062	17.8
			February	March	April		
MARKET WOOD PULP PRODUCTION - Tons (000).....	7,514	8,128	687	730	677	8,449	7.5
TOTAL WOOD PULP PRODUCTION - Tons (000).....	57,017	59,564	4,919	5,227	5,003	61,276	4.5
WOOD PULP IMPORTS - TONS (000).....	4,582	4,850	429	432	428	5,036	1.2
WOOD PULP EXPORTS - TONS (000).....	4,458	4,889	444	491	453	5,335	15.5
RAW MATERIALS CONSUMPTION - Tons (000)							
..PAPER AND BOARD MILLS : excluding :			February	March	April		
Wood Pulp.....:consumption for:.....	57,072	59,488	4,926	5,207	5,003	61,100	3.8
Waste Paper.....:construction & :.....	17,236	18,296	1,529	1,661	1,540	18,852	5.4
TOTAL.....: WMB grades :.....	74,308	77,784	6,455	6,868	6,543	79,952	4.2
PULPWOOD CONSUMPTION Cords(000)Amer.Pulpwd. Assn	91,434	93,946	7,743	8,249	8,137	97,056	3.3
EMPLOYMENT (000)			March	April	May		
Paper and Allied Products.....Total.....	673.7	679.0	683.8	684.1	686.8	683.8	1.5
Pulp, Paper and Board Mills.....Total.....E	248.1	244.9	244.1	244.2	244.7	244.2	-0.3
AVERAGE HOURLY EARNINGS OF PRODUCTION WORKERS ($)			March	April	May		
Paper and Allied Products.....	11.18	11.42	11.52	11.59	11.68	11.57	2.1
Pulp, Paper Mills.....E	13.63	14.00	14.13	14.15	14.30	14.12	2.1
Paperboard Mills.....E	13.98	14.30	14.30	14.53	14.59	14.41	2.0
CAPITAL EXPENDITURES, PAPER & ALLIED PRODUCTS			1987 Q3	1987 Q4	1988 Q1		
(Rept. by US Dept. of Com., Ann. Rates, Bill.$)*	8.77	8.92	8.84	10.02	9.58	11.37 Y	27.5
INDEX OF OUTPUT PER MAN-HOUR (1977=100).....			March	April	May		
:IN PULP, PAPER :...Production Workers.....	131.4	140.4 R	146.9	145.8	143.2	145.1	4.4
:AND BOARD MILLS:...All Employees.....	128.8	137.1 R	143.5	142.3	140.3	141.9	4.7
PAPER AND ALLIED PRODUCTS (Million $)			March	April	May		
Industry Shipments (Dept. of Commerce)*.....	103,916	118,855	10,674	10,990	11,043	129,866	14.7
Pulp, Paper and Paperboard*.....	44,033	51,518	4,723	5,039	4,920	58,769	20.9
Inventories (End of Period) - Total Industry*..	10,429	11,284	11,450	11,534	11,544	11,544	5.8
Pulp, Paper and Paperboard*.....	4,115	4,266	4,300	4,355	4,348	4,348	3.5
			1987 Q3	1987 Q4	1988 Q1		
Sales (Corporations Only).....	74,844	95,576	24,710	25,088	25,504	102,016	16.0
Earnings (Corporations Only).....	3,280	5,520	1,586	1,495	1,744	6,976	56.0
Depreciation (Corporations Only).....	3,389	4,279	1,108	1,051	1,169	4,676	10.2
Net Worth (Corporations Only).....	31,221	39,217	38,040	39,217	40,213	40,213	11.9
PRICE INDEXES (Bureau of Labor Stats)1982=100			March	April	May		
Pulp, Paper & Products, ex. Building Grades....	107.5	114.3	120.7	122.6	124.1	121.2	7.7
Wood Pulp.....	94.7	111.6	126.9	135.0	137.2	128.5	19.0
Waste Paper.....	142.6	181.8	190.5	187.9	184.5	189.0	9.3
Paper.....	107.0	111.5	119.7	121.0	122.0	119.8	8.8
Paperboard.....	106.5	118.1	127.1	132.6	133.1	127.7	10.6
PAPER DEMAND (INDEXED: 1977=100)			March	April	May		
Total Paper Production *.....	128.0	133.8	139.3	140.0	140.6	139.3	5.8
Paper New Supply *.....	133.7	140.6	148.9	145.6	148.5	145.9	5.4
Demand Indicators - (Weighted Average) *.....	146.7	154.4	160.9	161.0	161.0	160.3	6.0
Production of Nondurable Goods *...(21.2%).	130.1	136.8	141.8	142.1	141.8	141.6	5.8
Disposable Income .....*.(23.9%)	128.9	129.6	133.3	131.2	132.0	132.1	2.6
Total Printing and Publishing *...(54.9%).	168.9	172.0	180.3	181.3	181.0	179.8	7.1
Trend Factor	Not Available						
PAPERBOARD DEMAND (INDEXED: 1977=100)							
Total Paperboard Production *.....	121.9	129.2	131.8	131.9	132.0	131.8	3.6
Production for Domestic Use	118.7	126.5	127.6	130.0	130.0	128.8	3.5
Demand Indicators - (Weighted Average) *.....	121.9	125.9	129.8	130.5	131.1	130.2	5.1
Production of Consumer Goods *...(62.06%)	124.1	127.7	131.2	131.6	132.0	131.5	4.1
Production of Equipment *...(5.75%)	* 143.7	148.8	156.0	156.7	157.6	156.0	7.1
Production of Materials *...(32.19%)	113.8	118.3	122.5	123.8	124.5	123.2	6.7
Trend Factor	Not Available						
NEWSPRINT MARKETS			February	March	April		
Consumption by Publishers - Tons (000).....	13,158	13,583	1,063	1,167	1,122	13,224	3.0
Newspaper Pub. and Printing Empl. Total(000)...	461	471	476	475	475	476	2.0
PRINTING AND FINE PAPER MARKETS							
MAGAZINE ADVERTISING PAGES (PIB, Inc.).....	154,317	159,362	13,772	14,407	15,102	159,540	4.0
WHOLESALERS SALES AND INVENTORIES (Million $)							
Total Paper & Pap. Prdcts.,ex Wallpaper..Sales	38,245 R	44,741 R	4,047	4,600	4,083	50,028	22.0
Inventories (End of Period).	3,577 R	3,850 R	3,955	4,120	4,156	4,156	15.7
FIBRE BOX DATA (Fibre Box Association)			March	April	May		
Fibre Box Shipments (Million square feet).....	283,921	297,827	27,259	26,059	24,986	306,864	5.1
Container'bd Inventory at Mill & Plant(000Tons).	2,238	2,486	2,512	2,550	2,593	2,593	8.7
RETAIL TRADE (Billion $)			March	April	May		
Total Retail Sales *.....	1,437	1,509	132	132	132	1,572	6.6
Nondurable Goods Stores Sales *.....	899	951	82	81	82	973	3.8
GENERAL ECONOMIC DATA			March	April	May		
TOTAL INDUSTRIAL PRODUCTION (INDEX 1977 = 100)*..	125.1	129.8	134.7	135.5	136.0	135.0	6.1
PRODUCER PRICES(ALL COMMODITIES)(INDEX 1982=100).	100.2	102.8	104.9	105.8	106.5	105.3	3.8
CONSUMER PRICES (ALL ITEMS) (INDEX 1982 = 100)...	109.6	113.6	116.5	117.1	117.5	116.6	3.9
			February	March	April		
TOTAL CONSUMER CREDIT OUTSTANDING - (Billion $)..	586	621	619.2	620.9	626.9	626.9	9.1
GROSS NATIONAL PRODUCT - ANNUAL RATE (Billion$)..			1987 Q3	1987 Q4	1988 Q1		
G.N.P. or Expenditure - Current $.....	4,235	4,489	4,524	4,607	4,665	4,665	6.6
G.N.P. or Expenditure - 1982 $.....	3,713	3,821	3,836	3,881	3,915	3,915	3.8

lb/capita
Pap&Papbd Othr Totl Popul(mil)
.a - 645 + 18 = 663 241.6
.b - 670 + 17 = 687 243.8
.c - 683 + 17 = 700 244.7
.e - estimated by API

f - Wood Pulp Production excludes def., explo. & scrngs.
g - Adjusted for holiday shutdowns
Q - Quarter

R - Revised
Y - Full year estim. by U.S. Dept. of Com.

* - Seasonally Adjusted.


MICROCOPY RESOLUTION TEST CHART
NBS - 1010a
(ANSI and ISO TEST CHART No. 2)
1.0
1.1
1.25
1.4
1.6
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.8
PHOTOGRAPHIC SCIENCES CORPORATION
770 BASKET ROAD
P.O. BOX 338
WEBSTER, NEW YORK 14580
(716) 265-1600

24:1

CIS